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**Exhibit R-2, RDT&E Budget Item Justification:** PB 2015 Navy **Date:** March 2014

<b>Appropriation/Budget Activity</b> 1319: <i>Research, Development, Test &amp; Evaluation, Navy I BA 4: Advanced Component Development &amp; Prototypes (ACD&amp;P)</i>					<b>R-1 Program Element (Number/Name)</b> PE 0604279N I (U)ASE Self Protection Optimization							
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015 Base</b>	<b>FY 2015 OCO #</b>	<b>FY 2015 Total</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>Cost To Complete</b>	<b>Total Cost</b>
Total Program Element	11.896	0.725	0.169	8.033	-	8.033	7.951	6.200	3.600	7.945	Continuing	Continuing
3308: <i>Technology Development</i>	0.817	0.507	0.080	2.394	-	2.394	2.454	2.584	2.679	7.038	Continuing	Continuing
3309: <i>Assault Survivability Optimization</i>	11.079	0.218	0.089	5.639	-	5.639	5.497	3.616	0.921	0.907	Continuing	Continuing

# The FY 2015 OCO Request will be submitted at a later date.

## **A. Mission Description and Budget Item Justification**

This element includes development of Aircraft Survivability equipment and Electronic Warfare/Countermeasures solutions for the United States Navy, United States Marine Corps and Coalition Aircraft to include studies and evaluations of current and future aircraft threats, Modeling and Simulation for improved countermeasure capabilities, and development and testing to address new and emerging threats.

JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under ADVANCED COMPONENT DEVELOPMENT AND PROTOTYPES because it includes all efforts necessary to evaluate integrated technologies, representative models or prototype systems in a high fidelity and realistic operating environment.

<b><u>B. Program Change Summary (\$ in Millions)</u></b>	<b><u>FY 2013</u></b>	<b><u>FY 2014</u></b>	<b><u>FY 2015 Base</u></b>	<b><u>FY 2015 OCO</u></b>	<b><u>FY 2015 Total</u></b>
Previous President's Budget	0.711	0.169	0.706	-	0.706
Current President's Budget	0.725	0.169	8.033	-	8.033
Total Adjustments	0.014	-	7.327	-	7.327
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	0.073	-			
• SBIR/STTR Transfer	-	-			
• Program Adjustments	-	-	7.730	-	7.730
• Rate/Misc Adjustments	-	-	-0.403	-	-0.403
• Congressional General Reductions Adjustments	-0.059	-	-	-	-

## **Change Summary Explanation**

Technical: Not applicable.

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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319: Research, Development, Test & Evaluation, Navy I BA 4: Advanced Component Development & Prototypes (ACD&P)	R-1 Program Element (Number/Name) PE 0604279N I (U)ASE Self Protection Optimization	
Schedule: Project 3308 Technology Development. R-4 schedule exhibit has been incorporated. Schedule: Project 3309 Assault Survivability Optimization. R-4 schedule exhibit has been incorporated.		

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<b>Exhibit R-2A, RDT&amp;E Project Justification:</b> PB 2015 Navy										<b>Date:</b> March 2014																																		
<b>Appropriation/Budget Activity</b> 1319 / 4					<b>R-1 Program Element (Number/Name)</b> PE 0604279N / (U)ASE Self Protection Optimization				<b>Project (Number/Name)</b> 3308 / Technology Development																																			
<b>COST (\$ in Millions)</b>	<b>Prior Years</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015 Base</b>	<b>FY 2015 OCO #</b>	<b>FY 2015 Total</b>	<b>FY 2016</b>	<b>FY 2017</b>	<b>FY 2018</b>	<b>FY 2019</b>	<b>Cost To Complete</b>	<b>Total Cost</b>																																
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Quantity of RDT&E Articles	0.000	-	-	-	-	-	-	-	-	-																																		
<p># The FY 2015 OCO Request will be submitted at a later date.</p> <p><b>A. Mission Description and Budget Item Justification</b>            Project Unit 3308 Technology Development: Funds efforts that focus on the quick reaction prototyping of tactical Electronic Warfare (EW)/Countermeasures solutions for increased survivability providing friendly forces the self protection necessary for successful mission accomplishment. This program directly addresses the operational requirement of Strike platforms for optimization of EW/Countermeasure solutions across the Department of the Navy. Improved countermeasure capabilities and techniques through Modeling and Simulation, validated in subsequent field testing to address new and emerging threats, capitalize upon upgrades to Aircraft Survivability Equipment systems capabilities for Strike platforms and evaluate new Radio Frequency Countermeasure and Infra Red Countermeasure technologies.</p> <p><b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th><b>FY 2013</b></th> <th><b>FY 2014</b></th> <th><b>FY 2015</b></th> </tr> </thead> <tbody> <tr> <td><b>Title:</b> Technology Development</td> <td align="right">0.507</td> <td align="right">0.080</td> <td align="right">2.394</td> </tr> <tr> <td align="right"><b>Articles:</b></td> <td align="center">-</td> <td align="center">-</td> <td align="center">-</td> </tr> <tr> <td colspan="4"> <b>FY 2013 Accomplishments:</b>            Continued studies and vulnerability analysis for EW programs.         </td> </tr> <tr> <td colspan="4"> <b>FY 2014 Plans:</b>            Continue EW vulnerability studies/analysis, product development and test conducted for Strike aircraft across the Future Years Defense Program (FYDP).         </td> </tr> <tr> <td colspan="4"> <b>FY 2015 Plans:</b>            Continue EW vulnerability studies/analysis, product development and test conducted for Strike aircraft across the FYDP.         </td> </tr> <tr> <td align="right" colspan="4"><b>Accomplishments/Planned Programs Subtotals</b></td> </tr> <tr> <td></td> <td align="right">0.507</td> <td align="right">0.080</td> <td align="right">2.394</td> </tr> </tbody> </table> <p><b>C. Other Program Funding Summary (\$ in Millions)</b> N/A</p> <p><b>Remarks</b></p> <p><b>D. Acquisition Strategy</b> EW vulnerability studies/analysis, product development and test conducted for Strike aircraft across the FYDP.</p>														<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>Title:</b> Technology Development	0.507	0.080	2.394	<b>Articles:</b>	-	-	-	<b>FY 2013 Accomplishments:</b> Continued studies and vulnerability analysis for EW programs.				<b>FY 2014 Plans:</b> Continue EW vulnerability studies/analysis, product development and test conducted for Strike aircraft across the Future Years Defense Program (FYDP).				<b>FY 2015 Plans:</b> Continue EW vulnerability studies/analysis, product development and test conducted for Strike aircraft across the FYDP.				<b>Accomplishments/Planned Programs Subtotals</b>					0.507	0.080	2.394
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Exhibit R-2A, RDT&E Project Justification: PB 2015 Navy		Date: March 2014
Appropriation/Budget Activity 1319 / 4	R-1 Program Element (Number/Name) PE 0604279N / (U)ASE Self Protection Optimization	Project (Number/Name) 3308 / Technology Development

E. Performance Metrics

EW vulnerability studies/analysis, product development and test conducted for Strike aircraft across the FYDP.

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Navy

Date: March 2014

Appropriation/Budget Activity

1319 / 4

R-1 Program Element (Number/Name)

PE 0604279N / (U)ASE Self Protection Optimization

Project (Number/Name)

3308 / Technology Development

ASPO	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	
Milestones																													
Fleet Release															FR-16	▼							FR-18	▼					
Systems Development																													
Systems Development Reviews		FY-13 Review ▼				FY-14 Review ▼					FY-15 Review ▼				FY-16 Review ▼					FY-17 Review ▼					FY-18 Review ▼				FY-19 Review ▼
System Development Analysis			FY-13 Analysis				FY-14 Analysis				FY-15 Analysis				FY-16 Analysis					FY-17 Analysis					FY-18 Analysis				FY-19 Analysis
System Development																													
Test and Evaluation																													
Integrated Evaluation											FY-15 Int-Eval				FY-16 Int-Eval					FY-17 Int-Eval					FY-18 Int-Eval				FY-19 Int-Eval

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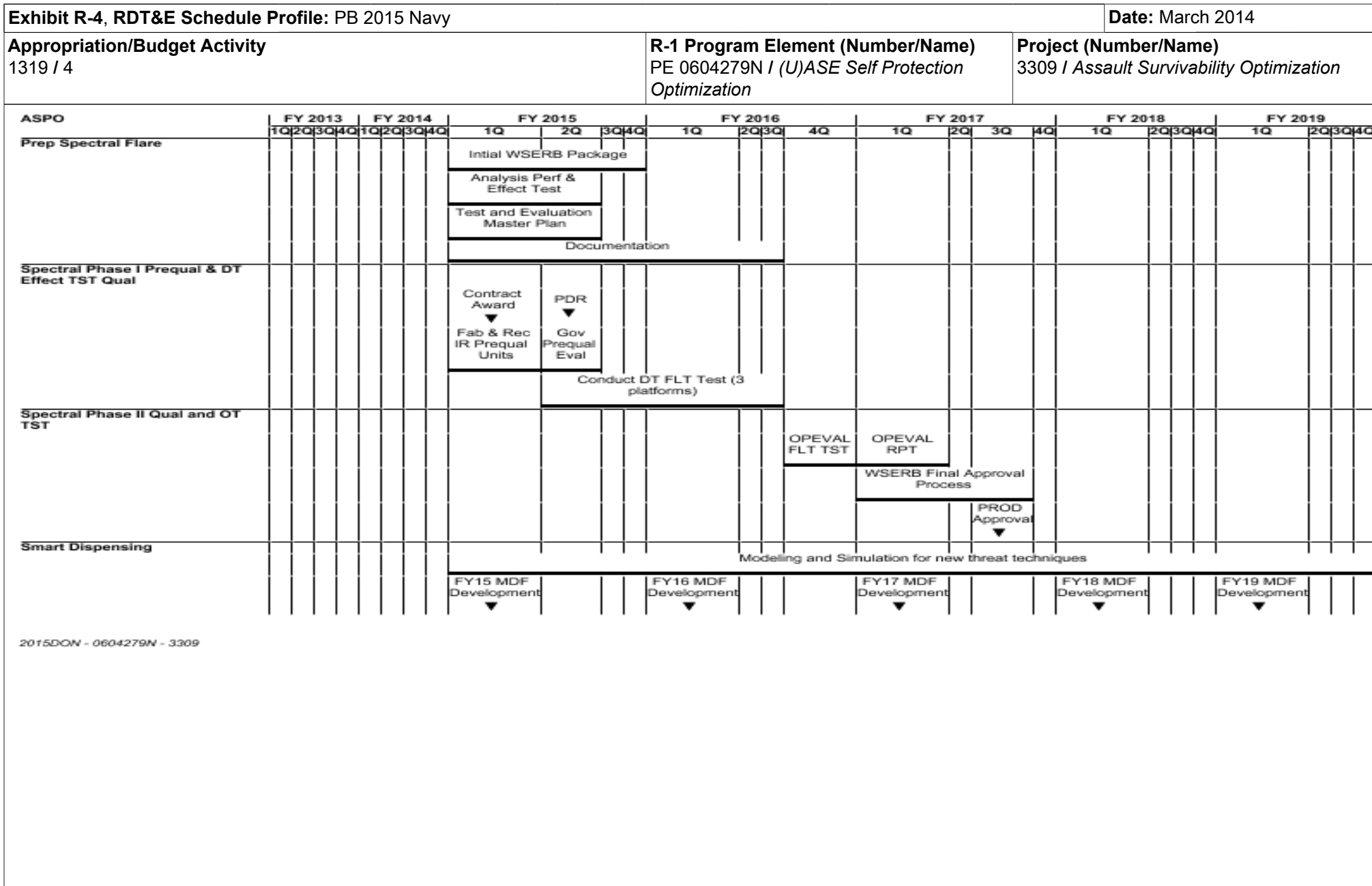
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<p># The FY 2015 OCO Request will be submitted at a later date.</p> <p><b>A. Mission Description and Budget Item Justification</b>  This project funds the development, testing, and rapid fielding of advanced countermeasures and enhanced employment techniques needed to support current and future operations for United States Navy and the United States Marine Corps aircraft. Incorporates capability advancements in Aircraft Survivability Equipment (ASE) and expendable countermeasures to develop and deploy countermeasure responses resulting in increased platform survivability. Resources will be applied to the following areas: 1. Studies and evaluations of current countermeasure and ASE capabilities and limitations, 2. Development and demonstration of advanced countermeasure, 3. Testing and evaluation of advanced countermeasures, 4. Development of system software for the testing and deployment of advanced countermeasure techniques, and 5. Development of and upgrades to modeling tools and specialized equipment required to conduct evaluation of advanced countermeasures.</p> <p><b>B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)</b></p> <table border="1"> <thead> <tr> <th></th> <th>FY 2013</th> <th>FY 2014</th> <th>FY 2015</th> </tr> </thead> <tbody> <tr> <td><b>Title:</b> Studies &amp; Analysis</td> <td>0.218</td> <td>0.089</td> <td>5.639</td> </tr> <tr> <td><b>Articles:</b></td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td><b>FY 2013 Accomplishments:</b> Continued studies and analysis for assault aircraft programs.</td> <td></td> <td></td> <td></td> </tr> <tr> <td><b>FY 2014 Plans:</b> Continue studies and analysis for assault aircraft programs.</td> <td></td> <td></td> <td></td> </tr> <tr> <td><b>FY 2015 Plans:</b> Begin development and testing for Advanced Countermeasures.</td> <td></td> <td></td> <td></td> </tr> <tr> <td><b>Accomplishments/Planned Programs Subtotals</b></td> <td>0.218</td> <td>0.089</td> <td>5.639</td> </tr> </tbody> </table> <p><b>C. Other Program Funding Summary (\$ in Millions)</b>  N/A</p> <p><b>Remarks</b></p>														FY 2013	FY 2014	FY 2015	<b>Title:</b> Studies & Analysis	0.218	0.089	5.639	<b>Articles:</b>	-	-	-	<b>FY 2013 Accomplishments:</b> Continued studies and analysis for assault aircraft programs.				<b>FY 2014 Plans:</b> Continue studies and analysis for assault aircraft programs.				<b>FY 2015 Plans:</b> Begin development and testing for Advanced Countermeasures.				<b>Accomplishments/Planned Programs Subtotals</b>	0.218	0.089	5.639
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<b>D. Acquisition Strategy</b> Continue to leverage improvements in ASE to enhance platform survivability on United States Navy and the United States Marine Corp platforms through more effective dispense techniques. Invest in enhancements to modeling and simulation tools to better evaluate effectiveness. Upgrade test and evaluation equipment to incorporate current and future threats. Develop and demonstrate advanced concept countermeasures for future threats.		
<b>E. Performance Metrics</b> Continuation of studies and analyses efforts related to assault aircraft platforms across Future Years Defense Program.		

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